1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier		
Product Description:	3-Oxo-pyrrolidine-1,2-dicarboxylic acid 1-tert-butyl ester 2-methyl ester	
Cat No:	SB-12D-001	
CAS No:	194924-96-4	
Relevant identified uses of the substance or mix	ture and uses advised against	
Recommended Use:	Laboratory Chemicals	
Uses advised against:	No information available	
Details of the supplier of the safety data sheet		
Company		
Advanced Chemical Intermediates Limited		
The Old Dairy		
Tresplatt		
Davidstow		
Cornwall		
PL32 9YD		
Tel: +44 (0) 1840 261451		
2. HAZARDS IDENTIFICATION		
Classification of the substance or mixture		
REGULATION (EC) No 1272/2008		
Acute oral toxicity	Category 4	
Acute dermal toxicity	Category 4	

	Acute Inhalation toxicity – Dusts and mists	Category 4
ſ	Skin corrosion/irritation	Category 2
	Serious Eye Damage/Eye irritation	Category 2
	Specific target organ systemic toxicity (single exposure)	Category 3

Label Elements



Signal Word

Warning

Hazard Statements H302 – Harmful if swallowed

H315 – Causes skin irritation

H320 – Causes eye irritation

H335 – May cause respiratory irritation

Precautionary Statements – EU (S28, 1272/2008)

P261 – Avoid breathing dust/fumes/gas/mist/vapours/spray

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other Hazards

No information available

3.

COMPOSITION/INFORMATION ON INGREDIENTS

Component: 3-Oxo-pyrrolidine-1,2-dicarboxylic acid 1-tert-butyl ester 2-methyl ester

CAS: 194924-96-4

EC No:

4.	FIRST AID MEASURES	
Description of first aid measures		
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes, Obtain medical attention	
Skin Contact	wash off immediately with soap and plenty of water removing all contaminated clothes and shoes, Obtain medical attention	
Ingestion	Clean mouth with water, Obtain medical attention	
Inhalation	Remove from exposure, lie down. Move to fresh air if breathing is difficult, give oxygen if not breathing, give artificial respiration, Obtain medical attention	

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray Carbon dioxide (CO2) Dry chemical foam

Extinguishing media which must not be used for safety reasons No information available

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or spillage and collect in suitable container for disposal. Use suitable absorbent if required. Do not let this chemical enter the environment

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE				
Precautions for Safe Handling				
Avoid contact with skin and eyes. Do not breath dust. Do not breath vapours or spray mist. Do not ingest				
Conditions for Safe Storage, including and incompatibilities				
Keep in a dry, cool and well-ventilated place. K	Keep in a dry, cool and well-ventilated place. Keep container tightly closed.			
8. EXPOSURE CONTROLS/PERSO	DNAL PROTECTION			
Control Parameters				
Exposure limits	Not applicable .			
Derived No Effect Level (DNEL)	No information available			
Predicted No Effect Concentration	No information available			
(PNEC)				
Evenerure Controls				
Exposure Controls				
Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to workstation location.			
Personal Protective Equipment	and safety showers are close to workstation location.			
1. Eye protection	Goggles			
2. Hand protection	Protective gloves			
3. Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure			
4. Respiratory protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 OR European Standard			
	EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator			
	if exposure limits are exceeded or if irritation or other symptoms are experienced.			
	a exposure mints are exceded of a mintation of other symptoms are experienced.			
Hygiene Measures	Handle in accordance with good industrial hygiene practice			
Environmental Exposure Controls	No information available			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Off-white, low melting
Boiling Point/Range	
Melting Point/Range	
Flash Point	
Molecular Formula	C11H17NO5
Molecular Weight	243.2620

10. STABILITY AND REACTIVITY

 Reactivity

 Chemical Stability

 Stable under normal conditions

 Possibility of Hazardous Reactions

 Hazardous Polymerization
 No informat

 Hazardous Reactions
 No informat

 Incompatible products. Heat.
 Incompatible Materials

 Acids, bases, strong oxidizing agents, strong reducing agents, Hazardous Decomposition Products

No information available No information available

nformation on Toxicological Effects	
<u>cute Toxicity</u>	
roduct Information	No acute toxicity information available for product
omponent Information	
hronic Toxicity	
arcinogenicity	There are no known carcinogenic chemicals in product
ensitization	No information available
Autagenic Effects	No information available
eproductive Effects	No information available
evelopmental Effects	No information available
arget Organs	No information available
Other Adverse Effects	The toxicological properties have not been fully investigated
ndocrine Disruptor Information	None known
12. ECOLOGICAL INFORMATION	
oxicity	
co-toxicity Effects	Do not empty into drains
ersistence and Degradability	No information available
io-accumulative Potential	No information available
Iobility in Soil	No information available
ther adverse effects	No information available
13. DISPOSAL CONSIDERATIONS	
Vaste Treatment Methods	

Waste Treatment Methods Waste from Residues/Unused Products Contaminated Packaging

Dispose of in accordance with local regulations Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO Not regulated ADR Not regulated IATA Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the substance or the mixture

Chemical Safety Assessment

A Chemical safety assessment has not been carried out.

International Inventories

16. OTHER INFORMATION					
Revision Date	20-Sep-2019				
Version Number	1.0				
Revision Summary	Not Applicable				
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006					

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.